

STATUS OF THE CLAIMS

Claims 1-2, 4-8 and 10-12 were pending.

Claims 1-2, 4-5, 7-8, and 10-11 have been rejected under 35 U.S.C. § 112 for lack of enablement.

Claims 1-2, 4-8, and 10-12 are presented for reconsideration.

REMARKS

Claims 1-2, 4-5, 7-8, and 10-11 have been rejected under 35 U.S.C. § 112 for lack of enablement as the claims are broadly drawn, but the specification only provides guidance for producing maize plants using the traits waxy, sugary2 or white endosperm. Applicants disagree. The specification discloses a number of additional traits, including waxy sugary-1 (*su1*), sugary-3 (*su3*), amylose extender (*ae1*), dull (*du1*), horny (*h*), shrunken-1 (*sh1*), shrunken-2 (*s2*), floury-1 (*fl1*), floury-2 (*fl2*), and the opaque series (*o1-o14*). Further, in the Examples section, there are numerous examples of other hybrids being in the claimed methods, specifically to the traits waxy (*wx1*), sugary-2 (*su2*), amylose extender (*ae1*), dull (*du1*), and white endosperm (*y1*).

Guidance is given in that the method of planting is explained in detail. That is, the two maize hybrids are planted in alternating blocks of rows at least 4 rows wide, the first hybrid is a male fertile seed which is homozygous recessive for two desired triploid traits; the second hybrid is male sterile homozygous recessive for one of the two traits and homozygous dominant for the other, permitting the fertile plant to pollinate the sterile plant, and harvesting the two hybrids separately. No other steps would be necessary for one skilled in the art to be able to plant maize seed according to the method of the present invention using seeds with other recessive traits.

As the Examiner knows, 35 U.S.C. § 112 states that the "specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear and concise terms as to enable an person skilled in the art to which it pertains" "to make and use the same". The above detailed guidance clearly enables one skilled in the art to make and use the invention of planting maize.

The Examiner has maintained this rejection as, in his opinion, inferior starch quality, pollen viability or seed set are indeed quite germane to the enablement of broad claims. If the starch produced by the corn plant is of inferior quality or quantity, then the specification has not taught how to use plants producing kernels containing aid starch, other than for reproductive purposes or for animal feed. Applicants disagree as it is only necessary that the invention have a use, and animal feed would be an adequate use. Further, the Examiner states that if there is poor pollen germinability or poor seed set, then few plants will be produced. Once again, this does not go to enablement as there is enablement even if a commercially feasible amount of corn is not grown, as long as there is corn produced by the claimed process. Finally, the Examiner states that if the corn plants produce starch with inferior quality or quantity, there is no reason to reproduce them. This is not true. Many corn genotypes are currently known, such as high amylose corn starch, which have inferior yield relative to dent corn, yet substantial amounts are commercially grown.

A telephone interview with the Examiner, the attorney of record (Karen Kaiser) and one of the inventors (Barry Nagle), was held on 29 March, an accurate summary of which was sent by the Examiner dated 4 April, 2005. During such interview, the Examiner clarified that it was unclear whether or not the majority of the embodiments encompassed by the claim were operable. The Examiner stated he would consider a declaration after final for evidence of seed set and starch produced by the genotypes.

Applicants respectfully enclose the declaration of Dr. Barry Nagle. Under Dr. Nagle's supervision and guidance, all the seeds set forth in Example 3 were successfully grown. Further, several genotypes were tested and all tested were determined to contain substantial amounts of starch. Dr. Nagle concludes "that there is clear proof that the invention is operable as there is substantial seed set and the starch produced is useful."

In light of the declaration and as it is clear that the method may be carried out by one skilled in the art using seed already commercially available using nothing more than the guidance provided in the specification to produce hybrid seed, the rejection has been overcome. Applicant submits the Application is now in condition for allowance and respectfully requests early notice to that effect.

Respectfully submitted,



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